



Monthly Wholesale Trade

Sales and Inventories

U.S. Department of Commerce
Economics and Statistics Administration
BUREAU OF THE CENSUS

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INTENTION TO REVISE WHOLESALE ESTIMATES. – The unadjusted and adjusted merchant wholesale sales, inventories, and inventories/sales ratio estimates will be revised utilizing the results of the 1995 Annual Trade Survey. Revised sales and stock/sales ratios for January 1994 through February 1997 and inventories for January 1995 through February 1997 are scheduled for release on May 6.

Sales. February 1997 sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences but not for price changes, were \$209.7 billion, up 2.1 percent (+/-0.8%) from the revised January level and 8.5 percent (+/-1.5%) above February 1996. The January preliminary estimate was revised downward by \$0.4 billion or 0.2 percent. February sales of durable goods increased 2.7 percent (+/-1.0%) from January and were 7.3 percent (+/-2.4%) higher than February 1996. Compared to last month, sales of professional and commercial equipment and supplies were up 7.0 percent to \$20.4 billion and sales of metals and minerals, except petroleum, increased 2.5 percent to \$8.7 billion. Sales of nondurable goods increased 1.4 percent (+/-1.1%) from January and were 9.7 percent (+/-2.0%) above February 1996. Compared to last month, sales of beer, wine, and distilled alcoholic beverages increased 4.9 percent to \$4.8 billion, while sales of petroleum and petroleum products declined 3.6 percent to \$16.8 billion.

Inventories. Total inventories of merchant wholesalers, after adjustment for seasonal variation but not for price changes, were \$260.1 billion at the end of February, unchanged (+/-0.3%) from the revised January level but 1.5 percent (+/-1.1%) above February 1996. The January preliminary estimate was revised downward by \$0.7 billion or 0.3 percent.

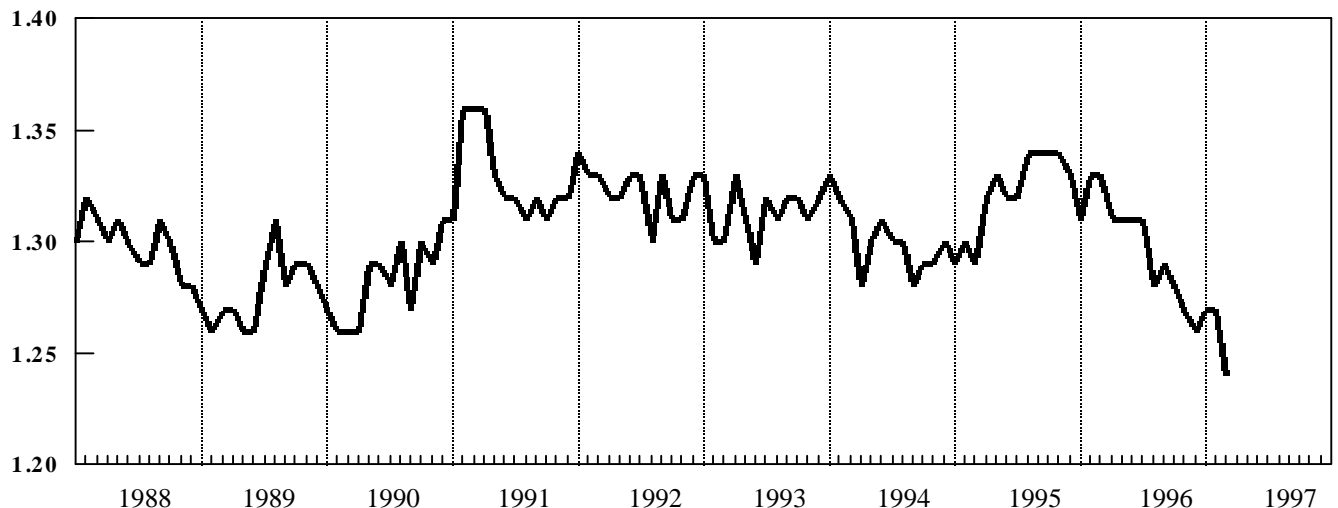
Among durable goods wholesalers, inventories of metals and minerals, except petroleum, were up 3.8 percent from last month to \$13.5 billion, while motor vehicles and automotive equipment fell 2.9 percent from January to \$26.6 billion. Among nondurable goods, inventories of farm-product raw materials increased 4.4 percent from last month to \$9.6 billion. Inventories of beer, wine, and distilled alcoholic beverages declined 2.2 percent from January to \$4.7 billion.

Inventories/Sales Ratio. The February inventories/sales ratio for merchant wholesalers, based on seasonally adjusted data, was 1.24. The February 1996 ratio was 1.33.

Data in this report are based on a sample and, therefore, are subject to sampling and nonsampling variability. A discussion of the reliability of the data and general survey methodology appears in BW/95-RV Current Business Report.

Monthly Inventories/Sales Ratios of Merchant Wholesalers: 1988 to 1997

(Data adjusted for seasonal, and trading-day differences, but not for price changes)



Monthly Wholesale Trade for March is scheduled to be released May 7, 1997 at 10:00 a.m.

Address inquiries concerning this report to Services Division, Bureau of the Census, Washington, DC 20233, or call Ronald Pienycoski, (301) 457-2779 or 457-2764. For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

This report is available on day of issue through the Department of Commerce's online Economic Bulletin Board (202-482-1986). The data are also

available on the internet - <http://www.census.gov/svsd/www/mwts.html>.

Table 1. Estimated Monthly Sales, Inventories, and Inventories/Sales Ratios of Merchant Wholesalers: 1997 and 1996

[In millions of dollars]

SIC ¹ code	Kind of business	Sales						Inventories						Inventories/Sales		
		Monthly			Percent change			Monthly			Percent change					
		Feb. 1997 (P)	Jan. 1997 (r)	Feb. 1996 (r)	Feb./ Jan. Jan.	Jan./ Dec. Dec.	Feb. 97 Feb. 96	Feb. 1997 (P)	Jan. 1997 (r)	Feb. 1996 (r)	Feb./ Jan. Jan.	Jan./ Dec. Dec.	Feb. 97 Feb. 96	Feb. 1997 (P)	Jan. 1997 (r)	Feb. 1996 (r)
Adjusted ²																
	U.S. Total	209,673	205,397	193,331	2.1	0.8	8.5	260,054	260,103	256,190	0.0	0.8	1.5	1.24	1.27	1.33
50	Durable	107,322	104,499	100,014	2.7	0.3	7.3	164,450	164,350	162,751	0.1	0.6	1.0	1.53	1.57	1.63
501	Automotive	17,630	17,505	17,124	0.7	-0.8	3.0	26,649	27,437	27,851	-2.9	2.6	-4.3	1.51	1.57	1.63
502	Furniture	3,557	3,530	3,364	0.8	-0.8	5.7	5,051	5,157	5,048	-2.1	-0.2	0.1	1.42	1.46	1.50
503	Lumber	7,239	7,064	6,486	2.5	0.5	11.6	7,783	7,814	7,584	-0.4	-1.0	2.6	1.08	1.11	1.17
504	Prof. equip.	20,422	19,087	17,588	7.0	-1.6	16.1	23,124	22,515	22,677	2.7	-0.3	2.0	1.13	1.18	1.29
505	Metals	8,724	8,510	8,172	2.5	1.5	6.8	13,467	12,978	12,656	3.8	1.5	6.4	1.54	1.53	1.55
506	Electrical	14,714	14,688	14,870	0.2	3.5	-1.0	23,364	23,308	23,850	0.2	0.9	-2.0	1.59	1.59	1.60
507	Hardware	6,446	6,321	5,743	2.0	3.6	12.2	12,254	12,304	11,284	-0.4	0.9	8.6	1.90	1.95	1.96
508	Machinery	15,774	15,414	15,180	2.3	-1.4	3.9	36,107	36,156	35,316	-0.1	0.0	2.2	2.29	2.35	2.33
509	Other Durable	12,816	12,380	11,487	3.5	0.5	11.6	16,651	16,681	16,485	-0.2	-0.3	1.0	1.30	1.35	1.44
51	Nondurable	102,351	100,898	93,317	1.4	1.3	9.7	95,604	95,753	93,439	-0.2	1.0	2.3	0.93	0.95	1.00
511	Paper	7,596	7,320	6,701	3.8	3.4	13.4	9,232	9,050	8,445	2.0	0.9	9.3	1.22	1.24	1.26
512	Drugs	9,001	8,913	8,045	1.0	1.1	11.9	14,657	14,869	13,177	-1.4	1.8	11.2	1.63	1.67	1.64
513	Apparel	7,804	7,699	5,781	1.4	10.7	35.0	12,303	12,169	12,123	1.1	2.7	1.5	1.58	1.58	2.10
514	Groceries	26,578	26,264	25,705	1.2	2.8	3.4	17,171	17,283	16,688	-0.6	0.2	2.9	0.65	0.66	0.65
515	Farm-products	9,901	9,526	10,129	3.9	-10.1	-2.3	9,612	9,207	11,631	4.4	-0.2	-17.4	0.97	0.97	1.15
516	Chemicals	4,276	4,370	4,083	-2.2	2.5	4.7	4,849	4,877	4,672	-0.6	1.3	3.8	1.13	1.12	1.14
517	Petroleum	16,770	17,399	14,182	-3.6	1.0	18.2	5,710	5,734	5,058	-0.4	-1.1	12.9	0.34	0.33	0.36
518	Alcohol	4,801	4,575	4,691	4.9	0.1	2.3	4,669	4,775	4,605	-2.2	-0.7	1.4	0.97	1.04	0.98
519	Other Nondur.	15,624	14,832	14,000	5.3	2.0	11.6	17,401	17,789	17,040	-2.2	1.9	2.1	1.11	1.20	1.22
Not Adjusted														Sales to date		
	U.S. Total	191,216	197,471	184,082	-3.2	-2.0	3.9	263,033	265,110	259,770	-0.8	2.5	1.3	388,687		370,095
50	Durable	96,912	97,568	94,256	-0.7	-4.8	2.8	164,737	164,320	163,100	0.3	1.8	1.0	194,480		188,115
501	Automotive	15,973	15,965	16,234	0.1	-9.0	-1.6	27,768	27,986	28,993	-0.8	7.0	-4.2	31,938		32,078
502	Furniture	3,134	3,138	3,108	-0.1	-9.3	0.8	4,955	5,028	4,957	-1.5	0.2	0.0	6,272		6,012
503	Lumber	6,110	6,139	5,669	-0.5	1.7	7.8	7,939	7,759	7,728	2.3	-0.3	2.7	12,249		11,289
504	Prof. equip.	18,666	18,915	16,779	-1.3	-7.0	11.2	22,916	22,830	22,473	0.4	0.1	2.0	37,581		33,687
505	Metals	8,148	8,408	7,960	-3.1	9.4	2.4	13,332	13,134	12,529	1.5	1.2	6.4	16,556		16,121
506	Electrical	13,434	13,865	14,141	-3.1	1.8	-5.0	23,294	23,285	23,778	0.0	2.6	-2.0	27,299		28,349
507	Hardware	5,582	5,683	5,197	-1.8	-1.0	7.4	12,180	12,070	11,228	0.9	-0.1	8.5	11,265		10,491
508	Machinery	14,433	14,350	14,497	0.6	-7.7	-0.4	36,251	35,831	35,457	1.2	0.6	2.2	28,783		29,157
509	Other Durable	11,432	11,105	10,671	2.9	-11.3	7.1	16,102	16,397	15,957	-1.8	0.9	0.9	22,537		20,931
51	Nondurable	94,304	99,903	89,826	-5.6	0.9	5.0	98,296	100,790	96,670	-2.5	3.5	1.7	194,207		181,980
511	Paper	7,125	7,503	6,574	-5.0	7.1	8.4	9,297	9,249	8,487	0.5	0.9	9.5	14,628		13,399
512	Drugs	8,245	9,519	7,723	-13.4	4.5	6.8	14,892	16,044	13,427	-7.2	7.0	10.9	17,764		16,390
513	Apparel	7,687	7,052	5,978	9.0	27.0	28.6	12,463	12,680	12,256	-1.7	5.5	1.7	14,739		11,186
514	Groceries	24,000	26,106	24,291	-8.1	1.7	-1.2	16,604	17,387	16,171	-4.5	-1.2	2.7	50,106		49,746
515	Farm-products	9,574	10,688	10,291	-10.4	-4.4	-7.0	11,929	11,914	14,446	0.1	5.4	-17.4	20,262		21,923
516	Chemicals	3,994	4,304	3,985	-7.2	9.2	0.2	4,946	4,809	4,765	2.8	0.7	3.8	8,298		8,003
517	Petroleum	15,697	18,043	13,771	-13.0	3.4	14.0	5,527	5,562	4,896	-0.6	-6.0	12.9	33,740		27,941
518	Alcohol	3,889	3,710	4,011	4.8	-26.4	-3.0	4,454	4,484	4,398	-0.7	1.3	1.3	7,599		7,744
519	Other Nondur.	14,093	12,978	13,202	8.6	-7.4	6.7	18,184	18,661	17,824	-2.6	8.7	2.0	27,071		25,648

p Preliminary estimate. r Revised.

1 For a full description of the SIC Codes shown above see the "1987 Standard Industrial Classification Manual" or the Current Business Reports

*Combined Annual and Revised Monthly Wholesale Trade" publication.

2 Data adjusted for seasonal variations and, in the case of sales, also for trading-day differences. See Table 3 for seasonal adjustment factors used.

Table 2. Coefficients of Variation and Standard Error for Sales and Inventories

SIC code	Kind of business	Coefficients of variation for level (x 100)				Standard error for trend				Coefficients of variation for level (x 100)		Standard error for trend
		Preliminary estimates		Final estimates		Ratio of two consecutive months		Year to Year Estimates		Cumulative sales estimates		Current year cumulative to previous year
		Sales	Inv	Sales	Inv	Sales	Inv	Sales	Inv	CY	PY	cumulative
		Median	Median	Median	Median	Median	Median	Median	Median			
	U.S. Total	1.5	1.9	1.5	1.9	0.5	0.3	1.0	0.9	1.4	1.2	0.9
50	Durable	2.2	2.8	2.2	2.8	0.6	0.3	1.4	1.4	2.0	2.0	1.1
501	Automotive	3.3	5.1	3.1	5.2	1.9	0.9	2.6	2.7	2.9	3.4	1.3
502	Furniture	12.6	11.6	12.5	11.7	2.4	0.8	4.5	3.6	12.7	11.8	4.1
503	Lumber	3.9	4.7	3.9	4.7	1.2	0.5	2.9	1.6	3.8	4.4	2.2
504	Prof. equip.	7.5	5.6	7.0	5.5	2.0	0.6	4.3	4.1	7.2	6.7	3.2
505	Metals	4.1	5.6	4.0	5.7	1.3	0.6	3.0	3.9	4.2	4.0	2.3
506	Electrical	4.3	4.4	4.2	4.3	1.5	0.5	3.4	2.0	3.9	4.4	3.4
507	Hardware	4.3	5.2	4.2	5.2	2.0	0.6	3.4	3.5	4.3	4.4	2.9
508	Machinery	4.5	5.5	4.4	5.3	1.7	0.6	5.1	3.1	4.2	4.9	2.9
509	Other Durable	5.5	4.9	4.7	4.7	3.1	1.0	5.0	3.7	4.8	4.9	4.4
51	Nondurable	2.4	2.4	2.3	2.5	0.6	0.4	1.3	1.0	2.7	2.0	1.4
511	Paper	5.3	4.6	5.2	4.6	1.2	0.3	2.4	2.0	5.0	4.3	1.5
512	Drugs	7.7	7.8	7.8	8.0	1.4	0.9	3.2	3.8	7.6	7.3	2.3
513	Apparel	7.8	7.4	6.5	7.3	2.3	1.0	7.2	4.3	7.6	5.3	7.4
514	Groceries	4.0	7.0	3.9	6.8	1.3	0.9	2.2	2.5	4.1	3.6	1.3
515	Farm-products	4.4	4.6	3.9	4.5	2.1	2.1	3.9	3.0	3.9	4.0	2.6
516	Chemicals	5.8	6.5	5.3	6.6	2.0	1.5	5.6	3.8	4.9	5.5	4.4
517	Petroleum	8.4	3.2	8.7	3.1	0.9	0.9	3.2	3.4	9.9	7.0	4.7
518	Alcohol	6.2	5.6	6.1	5.5	1.9	1.0	2.8	2.8	6.1	6.5	2.5
519	Other Nondur.	7.0	5.4	6.7	5.3	1.9	1.1	3.8	2.7	6.9	5.8	3.9

Note: The median measures of variability are based on the most recent 6 months of data.

Sample Design and Reliability of Data

There are two types of errors possible in an estimate based on a sample survey: sampling and nonsampling.

Sampling errors occur because observations are made on a sample, not on the entire population, and different samples could have led to different estimates. Standard errors and coefficients of variation, as calculated for this report, are measures of sampling variation. The margin of sampling error, as used on page 1, gives a range about the estimate which is a 90% confidence interval. If, for example, the trend estimate is up 1.2% and the standard error is 0.9%, then the margin of sampling error is $\pm 1.65 \times 0.9\%$ or $\pm 1.5\%$, and the 90% confidence interval is -0.3% to $+2.7\%$. If the interval contains 0, it cannot be stated with certainty whether there was an increase or decrease. For monthly level, the coefficient of variation (CV) is given. The resulting confidence interval is the estimated value $\pm 1.65 \times CV \times$ (the estimated value).

Nonsampling errors are usually attributed to many possible sources: (1) coverage error - failure to accurately represent all population units in the sample, (2) inability to obtain

information about all sample cases, (3) response errors, possibly due to definitional difficulties or misreporting, (4) mistakes in recording or coding the data obtained, and (5) other errors of collection or processing, or in imputing for missing or inconsistent data. Coverage error has an effect on the accuracy of estimates for this survey to the extent that the administrative records system, which forms the basis of our survey universe frame, does not contain all legal businesses. A major source of nonsampling error in the published estimates is due to the need to impute data for nonrespondents and for late and inconsistent reports. For all kinds of businesses combined, imputed data amount to about 26 percent of the total monthly wholesale sales estimates and 28 percent of the total monthly wholesale inventories estimates.

Nonsampling errors also occur in complete censuses. Although no direct measures of these errors have been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data to minimize their influence.

Official Business

Penalty for Private Use, \$300

Table 3. Seasonal Adjustment Factors for Sales and Inventories

SIC code	Kind of business	Sales						Inventories					
		1997			1996		1996	1997			1996		1996
		Mar.	Feb.	Jan.r	Dec.	Nov.	Feb.r	Mar.	Feb.	Jan.r	Dec.	Nov.	Feb.r
	U.S. Total¹	1.019	0.912	0.958	0.984	0.975	0.953	1.002	1.013	1.022	1.004	1.010	1.014
50	Durable	1.024	0.903	0.933	0.982	0.978	0.942	0.998	1.003	1.000	0.987	0.995	1.003
501	Automotive	1.058	0.906	0.912	0.995	0.983	0.948	0.991	1.042	1.020	0.978	1.018	1.041
502	Furniture	1.012	0.881	0.889	0.972	1.015	0.924	1.001	0.981	0.975	0.971	0.989	0.982
503	Lumber	0.977	0.844	0.869	0.859	0.965	0.874	1.049	1.020	0.993	0.986	0.963	1.019
504	Prof. equip.	1.037	0.914	0.991	1.049	0.959	0.954	1.000	0.991	1.014	1.010	1.004	0.991
505	Metals	1.045	0.934	0.988	0.917	0.920	0.974	1.006	0.990	1.012	1.015	0.972	0.990
506	Electrical	1.007	0.913	0.944	0.960	0.998	0.951	0.973	0.997	0.999	0.982	0.992	0.997
507	Hardware	0.939	0.866	0.899	0.941	0.987	0.905	1.011	0.994	0.981	0.991	0.987	0.995
508	Machinery	1.063	0.915	0.931	0.994	0.933	0.955	1.004	1.004	0.991	0.985	0.994	1.004
509	Other Durable	0.987	0.892	0.897	1.017	1.070	0.929	0.956	0.967	0.983	0.972	0.997	0.968
51	Nondurable	1.005	0.922	0.988	0.991	0.974	0.964	1.013	1.032	1.059	1.032	1.033	1.032
511	Paper	0.991	0.938	1.025	0.990	0.963	0.981	1.001	1.007	1.022	1.022	1.018	1.005
512	Drugs	0.974	0.916	1.068	1.033	0.983	0.960	0.991	1.016	1.079	1.027	1.010	1.019
513	Apparel	1.068	0.985	0.916	0.798	0.959	1.034	0.972	1.013	1.042	1.015	0.965	1.011
514	Groceries	0.995	0.903	0.994	1.005	1.000	0.945	0.981	0.967	1.006	1.020	1.034	0.969
515	Farm-products	1.059	0.967	1.122	1.055	0.976	1.016	1.114	1.241	1.294	1.225	1.212	1.242
516	Chemicals	1.025	0.934	0.985	0.924	0.942	0.976	1.018	1.020	0.986	0.992	0.976	1.020
517	Petroleum	0.973	0.936	1.037	1.013	0.979	0.971	0.965	0.968	0.970	1.021	1.017	0.968
518	Alcohol	0.931	0.810	0.811	1.103	1.036	0.855	0.979	0.954	0.939	0.921	1.070	0.955
519	Other Nondur.	1.020	0.902	0.875	0.964	0.907	0.943	1.053	1.045	1.049	0.984	1.000	1.046

r Revised



¹ Adjusted sales and inventories data shown in table 1 are obtained by dividing the unadjusted data by the adjustment factors shown above for the corresponding group. Adjusted data for the totals are obtained by adding the durable and nondurable goods. Seasonal factors shown for the totals will provide an approximation of the adjusted estimates, but may show small differences from the published data.

Note: The seasonal factors shown have been computed based on monthly estimates through the current month preliminary estimates.